# Restoration Strategies Program Update August 2018

The South Florida Water Management District's (SFWMD) \$880 million Restoration Strategies Program includes the design and construction of a suite of regional water storage, treatment and conveyance improvement projects that will improve water quality in America's Everglades. The program also includes a robust Science Plan consisting of research activities focused on investigating the critical factors that influence phosphorus (P) reduction and better understanding the sustainability of P removal performance at low P concentrations. The strategies also feature implementation of additional sub-regional source controls – where pollution is reduced at the source – in areas where P levels in stormwater runoff have been historically higher. Through May 2018, total program expenditures are approximately \$296 million and all projects are scheduled to be complete by December 2025.

#### **Eastern Flowpath**

#### Stormwater Treatment Area 1 West (STA-1W) Expansion #1

Construction is 83 percent complete; Completion expected December 2018

#### Stormwater Treatment Area 1 West (STA-1W) Expansion #2

Design activities will begin by October 2018

#### **G-341** Related Conveyance Improvements

Bolles East Canal Segment 3 (~3.2 miles) construction is 69 percent complete and expected to be complete by February 2019; Design of Segment 4 is ongoing and construction is expected to start by February 2019; Discussions with owners of the remaining Bolles East Canal bridges have been productive and have resulted in preliminary agreements regarding their replacement

#### **Central Flowpath**

#### **A-1 Flow Equalization Basin (FEB)**

Operational testing and monitoring was completed and routine operations began in July 2018

#### Western Flowpath

Pre-design site assessments (e.g. survey) for STA-5/6 Internal Improvements are ongoing; Design activities for the C-139 FEB will begin by October 2018

#### **Additional Components**

#### Stormwater Treatment Area (STA) Science Plan

Of the nine initial studies, three have been completed, others are nearing completion and two new studies have been initiated; The 2018 Science Plan Update was completed in July 2018; Preliminary results to date are as follows:

- STA soil amendments could potentially reduce P, however costs are high and impacts to downstream systems are uncertain
- Periphyton-based STA performance appears resilient despite higher flow pulses and extended periods of high flow
- STA canals do not appear to significantly affect inflow or outflow P concentrations
- increases in P were detected in STA outflow regions, however the source of increase continues to be studied
- deficiencies and biases were determined for existing P sampling methods; other validation activities will continue

#### **Sub-Regional Source Controls**

Development of sub-regional source control concepts and coordination with stakeholders is ongoing

#### **Mecca Impoundment**

Currently being evaluated as part of CERP's Loxahatchee River Watershed Restoration Project; an update on the tentatively selected plan will be presented at SFWMD's August 2018 Governing Board meeting

## **Restoration Strategies Program Update** August 2018

### **Consent Order<sup>1</sup> Milestones** (with deadlines or completion dates ranging from September 2017 through August 2019)

Project: Activity	Deadline	<b>Date Completed</b>	Days +/- 2
Eastern Flowpath			
STA-1W Expansion #1: Construction Status Report	3/1/2018	2/23/2018	+6
STA-1W Expansion #1: Complete Construction	12/31/2018		
STA-1W Expansion #2: Complete Land Acquisition	3/31/2018	1/31/2018	+59
STA-1W Expansion #2: Initiate Design	10/1/2018		
L-8 Divide Structure: Complete Construction	9/30/2018	7/7/2016	+815
S-375 Expansion: Complete Construction	12/31/2018	4/3/2017	+637
Central Flowpath			
A-1 FEB: Operational Monitoring and Testing Period Complete	7/29/2018	7/29/2018	0
Western Flowpath			
C-139 FEB: Initiate Design	10/31/2018		

<sup>1:</sup> FDEP Consent Order 12-1148 (associated with National Pollutant Discharge Elimination System Permit No. FL0778451-001-FL7A/RA) and FDEP Consent Order 12-1149 (associated with Everglades Forever Act Permit No. 0311207)

#### **Photo of the Month**



G-341 Related Conveyance Improvements – Bolles Canal Segment 3 construction (July 2018)

<sup>2: + =</sup> days ahead; - = days behind